

Appn. No.: 10/720,420
Amendment Dated May 17, 2007
Reply to Office Action of January 17, 2007

NTP-116US

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Currently Amended) An organic light-emitting device comprising:
a transparent substrate;
an anode layer;
a cathode layer;
organic functional layers sandwiched between the anode layer and the cathode layer;
and

~~an encapsulation layer fabricated formed directly on at least one side or both sides of the anode layer, the cathode layer, or the transparent substrate device;~~

wherein,

the encapsulation layer includes a thin multilayer structure which has a period number of 1 to 10 alternating layers formed of a polymer material layer and a ceramic material layer;

the encapsulation layer also includes a thick organic insulation layer on top of the thin multilayer structure, which is made up of polymer materials;

wherein:

the polymer material layers in the thin film structure are in the range of 50 to 1000 nm in thickness;

the ceramic material layers in the thin film structure are in the range of 10 to 1000 nm in thickness; and

the thick organic insulation layer in the encapsulation layer is in the range of 10 to 1000 μ m in thickness.

2. (Original) The organic light-emitting device of claim 1, wherein the substrate of the device includes one of glass and plastic.

3. (Canceled)

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4. (Original) The organic light-emitting device of claim 1, wherein the polymer material layers in the thin film structure include one polymer selected from the group consisting of poly(methyl methacrylate), poly(ethyl methacrylate), and UV curable resins.

5. (Canceled)

6. (Original) The organic light-emitting device of claim 1, wherein the ceramic material layers in the thin film structure include one material selected from the group consisting of nitrides, oxides, and nitrogen oxides.

7. (Canceled)

8. (Original) The organic light-emitting device of claim 6, wherein the ceramic material layers in the thin film structure include one material selected from the group consisting of silicon nitride, aluminum nitride, titanium nitride, silicon oxide, aluminum oxide, titanium oxide, silicon nitrogen oxide, aluminum nitrogen oxide and titanium nitrogen oxide.

9. (Original) The organic light-emitting device of claim 1, wherein the thick organic insulation layer in the encapsulation layer includes UV curable resins.

10-32. (Canceled)